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Also, since the light 20 turns on immediately when the terminal device is operated, the user does not need to pay attention to the turn-on of the light 20.

The operational steps of the information terminal device with display-illuminating means thus composed is explained 5 below, referring to the flow chart in FIG. 3.

First, when the power switch 5 is operated to turn on power at step 1, CPU 11 determines whether the lid 4 is open or closed by checking the state of the open/close switch 6 connecting with the input port (step 2).

At this time, when the lid 4 is closed, OFF signal is output to CPU 11 since the open/close switch 6 is pressed down by the lid 4.

CPU 11 recognizes that the lid 4 is closed, by reading this signal.

Therefore, in this case, being determined that the main body 1 is not used, the display 2 does not turn ON.

On the other hand, when the lid 4 is open, ON signal is output to CPU 11 since the open/close switch 6 is released (connected).

CPU 11 recognizes that the lid 4 is open, by reading this signal, determining that the main body 1 is in use, instructing the display controller 12 to turn ON the display 2 and to display a necessary display image (step 3).

Simultaneously, the display timer 14 starts monitoring 25 (step 4).

The display timer 14 monitors if a certain time period passes away with the touch panel 2a of the main body 1 being not operated (step 5), when the certain time passes away without being operated, determining the time is up, 30 turning off the display 2 to save power (step 6).

At this time, when the touch panel 2a is touch-operated, the timer is released, and the display 2 turns ON and the display timer 14 starts monitoring again (step 4).

On the other hand, when it is determined that the lid 4 is 35 open at step 2, power is supplied to the photosensor 7 while turning ON the display 2, thereby the ambient brightness of main body 1 is determined through the photosensor 7 (step 7).

In detail, when a sufficient amount of light is supplied to 40 photosensor 7, the photosensor 7 outputs ON signal to CPU 11 and CPU 11 recognizes that the ambience of the main body 1 is light by reading this signal.

On the contrary, when a sufficient amount of light is not supplied to photosensor 7, the photosensor 7 outputs OFF 45 signal to CPU 11 and CPU 11 recognizes that the ambience of the main body 1 is dark by reading this signal.

When CPU 11 recognizes that the ambience of the main body 1 is dark, CPU 11 controls the illumination controller 13 to turn ON, thereby turning on the light 20 (step 8).

When the light 20 turns on, the illumination timer 15 simultaneously starts monitoring (step 9).

The illumination timer 15 monitors if a certain time period passes away with the touch panel 2a of the main body 1 being not operated (step 10), when the certain time passes 55 away without being operated, determining the time is up, turning off the light 20 to save power (step 11).

At this time, when the touch panel 2a is touch-operated, the timer is released, and the light 20 turns ON and the illumination timer 15 starts monitoring again (step 9).

As described above, in the information terminal device with display-illuminating means in this embodiment, since the light 20 as the illuminating means is provided on the lid 4 for protecting the display 2, it is not necessary to install any backlight with a certain thickness and weight at the bottom side of display like the conventional terminal devices. Therefore, the terminal device can be lightened and

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thinned freely, and further its manufacturing cost can be reduced since it needs no light-dispersing lens.

Also, with the light 20 disposed at the top end of the lid 4, light can be supplied to the entire display 2 from above. Since the position of the light 20 can be adjusted by moving rotationally the lid 4, the entire display 2 can be illuminated uniformly. So, the display 2 can be seen surely even at night and at a dark place.

Namely, in this embodiment, the light source is located above the main body 1, thereby a distance from there to the display 2 can be obtained much and light can be dispersed sufficiently and naturally, therefore the top face including the display 2 can be illuminated totally. Thus, since light is supplied to the wide rage of the display 2, the terminal device with enhanced visual and handling performances can be obtained.

Furthermore, with light supplied from above the display 2, the display 2 can be illuminated efficiently and uniformly and therefore can be seen sufficiently even by a slight amount of light illumination. Hence, the light 20 itself can be miniaturized and the consumed power of the light 20 can be saved.

In addition, in the information terminal device with display-illuminating means in this embodiment, only when the illumination is necessary the light 20 is turned on then turned off automatically with the open/close switch 6, photosensor 7 and timer means. The turn-on/off operation of the light 20 is not necessary. Therefore, the handling performance of the terminal device can be enhanced and the wasteful power consumption due to neglecting to turn off the light 20 can be prevented securely.

<Second Embodiment>

An information terminal device with display-illuminating means in the second preferred embodiment according to the invention is explained referring to the drawings.

FIGS. 4A and 4B are general perspective views showing the information terminal device with display-illuminating means in the second embodiment according to the invention. FIG. 4A shows a state that the illuminating means is turned off and FIG. 4B shows a state that the illuminating means is turned on.

FIGS. 5A to 6B are enlarged partial views showing the illuminating means in the turn-on and turn-off states in the information terminal device with display-illuminating means in this embodiment. FIGS. 5A and 6A are partial perspective views and FIGS. 5B and 6B are partial cross sectional side views.

FIG. 7 is a block diagram showing a controller of the information terminal device with display-illuminating50 means in this embodiment.

As shown in these drawings, the information terminal device with display-illuminating means in this embodiment is a modification of the first embodiment described above. Instead of the light 20 of fixed type, lights 30 are provided rotatably on the lid. The other components in this embodiment are almost similar to those in the first embodiment. Therefore, like parts are indicated by like reference numerals as used in the first embodiment and their explanations are omitted.

Namely, the terminal device in this embodiment is provided with the light 30 as the illuminating means, and the light 30 are disposed rotatably toward the display.

In detail, as shown in FIGS. 4A and 4B, the illuminating means in this embodiment is structured such that both of the top-end side parts of the lid 4 can move rotatably toward the display 2 of the main body 1. The lights 30 are installed at the bottom side of the side parts.